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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,831	01/11/2001	Yue Chen	206585	8533

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MICROSOFT CORPORATION
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EXAMINER

SCHNEIDER, JOSHUA D

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/758,831	Applicant(s) CHEN ET AL.	
	Examiner Joshua D. Schneider	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/21/2005 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 9, 17, and 24, have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant has, however, made several arguments that need to be addressed as the changes to the rejection are made to clarify the teaching of what is well known and how the art may be applied for broader relevance given the knowledge of one of ordinary skill in the art. Applicant has argued that the emulator does not function as a computer-based switch. However, this conclusionary statement is not supported by any fact. The basis of this argument seems to be that the emulator of Kram is not physically located inside the switch device. This does not appear to be a requirement in any of the claims. The claims repeatedly have separate limitations for a switching component and a test control component. Furthermore, Applicant's specification teaches that this is not a necessary feature, and provides no disclosure that such an embodiment would be particularly desirable. Applicant's specification teaches that the invention can be embodied as program modules that can be distributed throughout a system (page 5, lines 1-16).

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This seems to be the way the applied reference operates as well, and Applicant has demonstrated no differences.

4. Applicant has also argued that the network adapters cannot be disabled to create network failures. Again, the evidence here seems to clearly state otherwise. The Kram reference clearly creates the same types of failures as claimed in claims 4-7 of the instant application as well as persistent outages (see abstract and column 3, lines 33-50). The argument seems to say that the Kram reference is somehow not functional, and such an argument is simply not valid. In the case that applicant is arguing that the location of the failures is not the same as in the instant application, Applicant is reminded that the failures may be created anywhere in the network and still be a failure between the network adapters and the network servers. The network adapters are clearly disabled as they are made to be nonfunctional in the same way as claimed by the applicant. No other interpretation is apparent from the specification or has been argued to be found anywhere in the specification.

5. The final argument is that there is no motivation to combine the references. This argument is given no weight, as it does not address the properly established motivation, which was clearly found in the Kram reference. Furthermore the teachings of the specification would seem to clearly show that the knowledge of one of ordinary skill in the art at the time of invention would lead one to believe that any differences between the claims and the Kram reference would be obvious. In summary, no compelling evidence has been found anywhere in the arguments to show differences between the applied art and the limitations of the instant application. Applicant is invited to call to explain anything that may have been misinterpreted and could be used to expedite further examination in necessary.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,314,531 to Kram in further view of How Networks Work by Derfler and the Applicant Admitted Prior Art (AAPA).

8. With regards to claims 1, 9, 17, and 24, Kram teaches network-switching elements with connections to external networks and connections to network servers (See Fig. 3). Kram teaches that it is well known to test and debug for many types of communications failures, including transient and persistent failures (column 2, lines 12-23), by emulating such communication failures (column 3, lines 30-55). Kram fails to explicitly teach the tested element being a switch between an external network and a private network. Kram does teach that the both LANs (typically private) and WANs (typical of external connections to private networks) are well known in the art (column 1, lines 7-59). Derfler further teaches that the switching between LANs and WANs was well known in the art (pages 144-151, 163-167, and 196-201). These connections between various networks are often accomplished with Point-to-Point Tunneling Protocols (PPTP) or Private Network-to-Network Interfaces (PNNI). These well known systems allow secure connections to private networks from external networks as taught by Derfler. The AAPA also teaches that private networks are well known in server networks for the Internet. These networks must be connected to public networks from which users may access the

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information on the private networks. It would have been obvious to one of ordinary skill in the art at the time of invention to combine the network testing of Kram to the external network accesses of private WANs of Derfler and the AAPA in order to provide more robust testing of the fault rich WAN environment.

9. With regards to claims 2 and 15, Kram teaches that the test controller must be in communication with the external network through which it is conducting its tests (column 4, lines 3-13).

10. With regards to claims 3-7, 10-14, 18-22, and 25-29, Kram teaches using data operations such as delays, drops (deletions), reordering (shuffling), and introducing errors (corruption), in order to test and debug network systems (see abstract and column 3, lines 33-50).

11. Claims 8, 16, 23, and 30, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,314,531 to Kram and How Networks Work by Derfler as applied to claims 1, 3-7, 9-14, 17-22, and 24-29 above, and further in view of "Crash-Proof," PC Magazine, by Derfler.

12. With regards to claims 8, 16, 23, and 30, Kram and How Networks Work by Derfler fail to teach network flow monitoring in the traditional sense of the phrase, though it is well known in the art and necessary to the rerouting of the data for the emulation that is taught. However, as taught in "Crash-Proof," by Derfler, monitoring flows for load balancing is very well known in the art (page 136 and 137). It would have been obvious to one of ordinary skill in the art at the time of invention to combine the load balancing of Derfler with the switch of Kram and Derfler in order to create a more robust network switching system.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS


KIM HUYNH
PRIMARY EXAMINER
6/6/05